

What is claimed is:

1. Structure for a passenger vehicle, containing a passenger cell with a windshield frame which is attached to a panel structure of the passenger cell, with a distinguishing feature that the panel structure of the passenger cell and the windshield frame consist of high-strength non-metallic material, such as fiber-reinforced plastic, and are structurally joined.

2. Structure according to Claim 1, wherein on a side B facing the panel structure, the windshield frame is provided with flanges which are held in position on a first panel section and a second panel section of the panel structure by means of adhesive bonding.

3. Structure according to Claim 2, wherein the panel structure is a front panel structure, and

wherein hollow spaces of columns of the windshield frame contain additional supporting columns, made of high-strength metal, that are attached to the front panel structure.

4. Structure according to Claim 3, wherein each support column is held on the front panel structure by means of a retaining plate.

5. Structure according to Claim 4, wherein the retaining plate has legs that extend toward each other at an angle and rest on corresponding panel sections of the front panel structure.

6. Structure according to Claim 4, wherein the retaining plate is held in position with bolts, which align with tap holes of an insert, integrated in the front panel structure.

7. Structure according to claim 6, wherein the insert is a metallic insert.

8. Structure according to claim 3, wherein the support columns are attached to columns of the windshield frame only in an area of free ends of the support columns by means of a foam material body.

9. Structure according to claim 4, wherein the support columns are attached to columns of the windshield frame only in an area of free ends of the support columns by means of a foam material body.

10. Structure according to claim 5, wherein the support columns are attached to columns of the windshield frame only in an area of free ends of the support columns by means of a foam material body.

11. Structure according to claim 6, wherein the support columns are attached to columns of the windshield frame only in an area of free ends of the support columns by means of a foam material body.

12. Structure according to claim 3, wherein each support column includes a minimum of two tubes that fit into each other.

13. Structure according to claim 4, wherein each support column includes a minimum of two tubes that fit into each other.

14. Structure according to claim 5, wherein each support column includes a minimum of two tubes that fit into each other.

15. Structure according to claim 6, wherein each support column includes a minimum of two tubes that fit into each other.

16. Structure according to claim 8, wherein each support column includes a minimum of two tubes that fit into each other.

17. A passenger vehicle assembly comprising:  
a passenger cell comprising panel structure, and  
a windshield frame attached to the passenger cell of the windshield frame,

wherein both the windshield frame and the panel structure to which it is attached consist of high-strength nonmetallic material.

18. An assembly according to claim 17, wherein said non-metallic material is carbon fiber reinforced plastic.

19. An assembly according to claim 18, wherein said windshield frame and panel structure are attached by adhesive bonding.

20. An assembly according to claim 19, wherein the panel structure is a front panel structure, and,

wherein hollow spaces of columns of the windshield frame contain additional supporting columns, made of high-strength metal, that are attached to the front panel structure.

21. A method of making a passenger vehicle assembly comprising:  
a passenger cell comprising panel structure, and  
a windshield frame attached to the passenger cell of the windshield frame,

wherein both the windshield frame and the panel structure to which it is attached consist of high-strength nonmetallic material,

said method comprising adhesive bonding of the windshield frame with the panel structures.

22. A method according to claim 21, wherein said non-metallic material is carbon fiber reinforced plastic.

23. A method according to claim 22, wherein the panel structure is a front panel structure, and,

wherein hollow spaces of columns of the windshield frame contain additional supporting columns, made of high-strength metal, that are attached to the front panel structure.